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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/541,454

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EXAMINER

LOUIE, MANDY C

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

02/12/2010

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/541,454	<b>Applicant(s)</b> YOSHIMURA ET AL.	
	<b>Examiner</b> MANDY C. LOUIE	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 November 2009.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_\_ is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 12-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/21/09</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 12-16 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- a. Regarding claim 12, it is unclear as to the limitation "an average particle diameter (major axis diameter) in the range..." indicate whether the range is describing the major axis diameter or the average particle diameter wherein the major axis diameter is provided as an example.

- b. Regarding claims 13-15, it is unclear as to what is being "characterized".

- c. Regarding claim 16, it is unclear whether "with one or more interposed layers of coating films" would include the adhesion layer.

The other dependent claims do not cure the defects of the claims from which they depend; therefore, the dependent claims are also rejected under 35 U.S.C. 112, second paragraph.

### ***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 12-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ochiai [JP 64068313] in view of Hashizume [JP 10-168339].

Regarding claim 12, Ochiai teaches a method for forming magnetic cream by coating the surface of magnetic particles, which may be composed of rare-earth elements, with pigment particles [abstract] as a primary component of a adhesion layer on the magnetic particle [Fig. 1, (2)], wherein the diameter of the magnetic particle may be 80 microns and the diameter of the pigment particles may be less than 5 microns [abstract]. Ochiai also teaches various methods of adhering the pigment layer to the magnetic particle, wherein one technique would include dispersing the magnetic particles in a dispersion containing a binder and pigment particles in an aqueous solution [Japanese document, pg 75].

Although the prior art does not explicitly teach the major axis diameter being the claimed ranges, it would have been obvious to one of ordinary skill in the art that the diameter of circular particles (as shown in Fig. 1 of Ochiai) would be the same in either the major or minor axis direction (i.e. if the diameter of the circular particle is about 80 micrometers, the major axis diameter would also be about 80 micrometers).

Furthermore, the pigment/binder coated magnetic particle would innately be oxidation-resistant due to the nature of a coating existing on the magnetic particle.

However, Ochiai appears to be silent in drying the rare earth metal containing magnet powder having adhered to the surface thereof the treating solution containing the pigment. Hashizume remedies this.

Regarding claim 12, Hashizume teaches drying pigment coated magnetic particles that were dispersed in a treating solution containing resin (binder) [0035], wherein the magnetic particles may be 150 micrometers or less [0012] and the pigment may be titanium oxide [0017] with a diameter of 0.01-1 micrometers [0019]. It would have been obvious to one of ordinary skill in the art to dry the coated magnetic particles with the treating solution. One would have been motivated to do so to polymerize the binder and improve adhesion between the pigment and the magnetic particles [Hashizume, 0034].

Regarding claim 13, Ochiai in view of Hashizume teaches solid liquid separation (filtration) of the after-processing slurry (treating solution) [Hashizume 0043]. It would have been obvious to one of ordinary skill in the art to filter the magnetic particles with the treating solution. One would have been motivated to do so to control the viscosity and solid content of the solution [Hashizume, 0043], while also facilitating the adhesion of the pigment coat onto the magnetic particle [Hashizume, 0047].

Regarding claim 14, Ochiai in view of Hashizume teaches the pigment content may range from 1-100 weight section. Although the prior art does not explicitly teach the claimed range for the pigment concentration, it would have been obvious to one of ordinary skill in the art to optimize the concentration as a workable parameter so as to

control the tinting of the magnetic particles while reducing the omission of a color pigment [Hashizume, 0015].

Regarding claim 15, Ochiai in view of Hashizume teaches the treating solution may further contain an organic dispersing medium so as to improve adhesion [Hashizume, 0020, or 0030].

Regarding claim 16, teaching of Ochiai in view of Hashizume applied to claim 12 is further applied to claim 16, wherein at least one adhesion layer containing the pigment (binder/pigment layer) is adhered to the outermost surface of the magnetic particle [Ochiai, Fig. 1].

### ***Response to Arguments***

3. Applicant's arguments, see pg 3, paragraph 5 of remarks, filed 11/05/09, with respect to the rejection(s) of claim(s) 12-16 under 35 USC 103(a) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Ochiai and Hashizume.

### ***Conclusion***

1. No claim is allowed.
2. Claims 12-16 are rejected for the reasons aforementioned.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MANDY C. LOUIE whose telephone number is

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(571)270-5353. The examiner can normally be reached on Monday to Friday, 7:30AM - 5:00PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571)272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/M. C. L./  
Examiner, Art Unit 1792

/Timothy H Meeks/  
Supervisory Patent Examiner, Art Unit 1792